

Work Order ID 63342

Page 1

Wednesday, October 27, 2010 4:00:09 PM

Item ID: D412-711-101

Accept



Setup

Start



Revision ID:

Item Name: Replacement Bubble Window

Stop



Start Date: 10/27/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:



Date: 10/10/28 Tooling:

Date:

Run

Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D412-711-101	A

100



DC

Document Control

Memo

Photocopy bluefiles and create labels
for PPP D412-711-101 Change 002

0.00

10-11-02

110



HandThermo

Hand Finishing Thermoforming

HAND FINISHING THERMOFORMING

Memo

Set up Machine as per folio FTA 077 and D711W program

0.00

10/10/28

120



HandThermo

Hand Finishing Thermoforming

HAND FINISHING THERMOFORMING

Memo

Cut Blanks to 36" by 39"

0.00

10/10/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



THERMOFORMING MACHINE

Thermoform

Thermoforming Machine

Memo

0.00

Thermoform as per Dwg. D412-711-101 using DT 9640 and Folio FTA
077 Dwg. Rev. _____ Folio Rev. _____

10/10/28

140



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Quality Control

Memo

0.00

1) Check Surface finish for undesired marks, voids, dimples etc. 2) Check
depth of bubble to ensure conformity to drawing tolerances.

10/10/28

150



QC8- Inspect parts - second check

0.00

QC

Quality Control

Memo

0.00

10/10/29

W/O:		WORK ORDER CHANGES					
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Required Date: 11/11/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



HAND FINISHING THERMOFORMING

HandThermo

Memo

0.00

Hand Finishing Thermoforming

1) Trim off excess flange material
2) Buff out any light scratches or
3) Etch part number and batch number

170



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

Quality Control

1) Visually inspect for clarity, and proper formation.

180



QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

1) Visually inspect for clarity, and proper formation.

W/O:		WORK ORDER CHANGES					
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Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

185

QC4- 100% Inspect kits for completeness

0.00

S. dululuz



QC

Quality Control

190

Identify as per dwg & Stock Location. 80

0.00

Rec



Packaging

Packaging

Memo

0.00

W. Basl -

200

QC21- Final Inspection - Work Order Release

0.00



QC

Quality Control

Memo

0.00

CR 10/11/03 MF
MF 10-11-2

W/O:		WORK ORDER CHANGES					
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Picklist Print

Wednesday, October 27, 2010 4:00:58 PM

Page 1

Work Order ID: 63342



Parent Item: D412-711-101



Parent Item Name: Replacement Bubble Window

Start Date: 10/27/2010

Required Date: 11/11/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-02-01 JLM
Manufacture in-house 10/06/28 DL

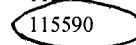
IPP Rev. B.

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MACRLICS.236		Purchased		No			sf	73.0000	16	16			

Plexiglass G .236"



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
therm	73	
113571	17	
115096	16	
115590	40	



BB
10/10/28

W/O:		WORK ORDER CHANGES					
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DART AEROSPACE LTD	Work Order:	63342
Description: BUBBLE (W)indow	Part Number:	D412-711-101
Inspection Dwg: D412 711 101 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: BB

Date: 10/10/28

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
32.0	REF	32.25	✓			
31.0	REF	31.125	✓			
1.50	H.I.D	1.5	✓			
1.78		1.875	✓			
.070	.06950	.096	✓			
.090		.090	✓			
.050		.076	✓			
15	±0.5	14.9	✓			

Measured by: BB

Date: 10/10/28

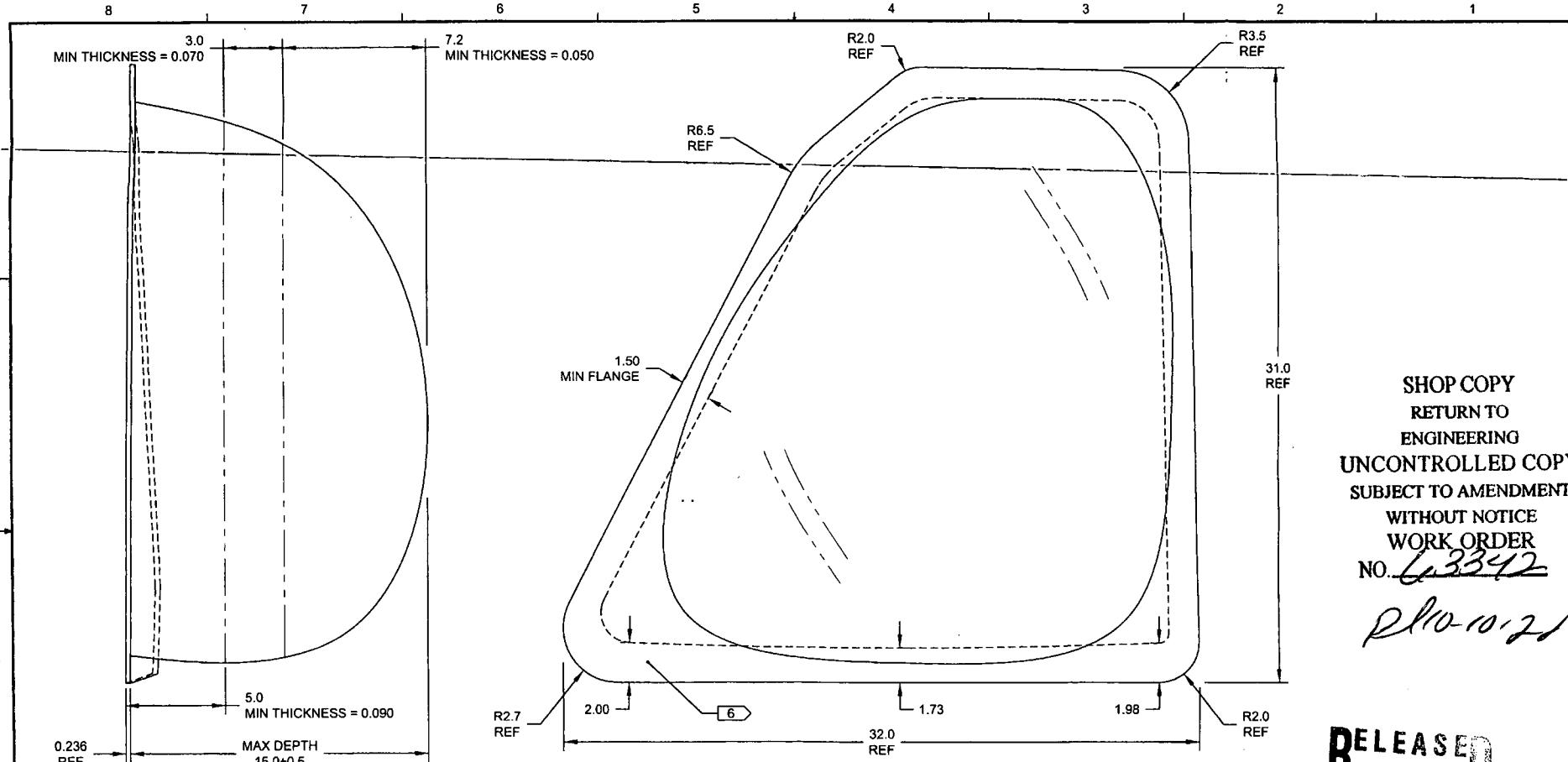
Audited by: W.H.

Date: 10/10/28

Preliminary Approval:

Date:

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	



D412-711-101 REPLACEMENT WINDOW

NOTES:

- 1) MATERIAL: PLEXIGLAS G CLEAR CAST ACRYLIC SHEET PER LP-391 TYPE 1 GRADE C OR POLYCAST II CLEAR ACRYLIC SHEET PER MIL-P-5425, 0.236 THICK (STOCK, REF. DART SPEC. M-ACRYLIC-S-236)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE P/N "D412-711-101" & B/N "BXXXXX" ON THE INSIDE SURFACE OF THE BUBBLE WINDOW FLANGE, WITHIN 0.25" OF BUBBLE. USE 0.125" LETTERS TO MAX. DEPTH OF 0.005"
- 7) WEIGHT: 8.0 lbs
- 8) VACUUM FORMING: PER FOLIO FTA077 USING DT9640 MOLD AND DART QSI 022

A	NEW ISSUE	MB	10.06.28
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>		
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	10.06.28		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D412-711-101 REV. A
SHEET 1 OF 1

TITLE: REPLACEMENT WINDOW NTS

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